REMARKS

Applicant has carefully reviewed the Office Action mailed on February 4, 2004. Applicant respectfully traverses all objections, rejections, and assertions made by the Examiner. Claims 23, 29, 35 and 36 are amended. Claims 37 and 38 are newly presented. Claims 23-38 remain pending.

Applicant wishes to thank the Examiner for the telephone interview on March 2, 2004. During the interview, the merits of the rejection under 35 U.S.C. §102(e) were discussed. In light of that discussion, a number of remarks and amendments are presented below for further consideration. It is believed that these remarks and amendments overcome the rejection of claims 23-36.

Claims 23-36 are rejected under 35 U.S.C. §102(e) as being anticipated by either Trauthen et al. in U.S. Patent No. 6,491,619 or by Hamilton et al. in U.S Patent No. 6,086,556. Regarding claims 23-28, the Examiner indicated that Hamilton et al. taught claim 23 in Figure 1 and that Trauthen et al. taught claim 23 in Figures 6, 11 and 12. During the telephone interview it was agreed that Figure 1 of Hamilton et al. did not teach the limitation of:

> a tie layer disposed between the distal waist of the balloon and the distal end region of the inner tubular member, the tie layer having a length that is substantially the same as the distal waist length.

Accordingly, Applicant respectfully requests that the rejection of claims 23-28 in light of Hamilton et al. be withdrawn.

Also during the telephone interview, the Examiner indicated that the structure in Trauthen et al. that met the above-quoted limitation is shown in Figures 11 and 12 as indicated below:

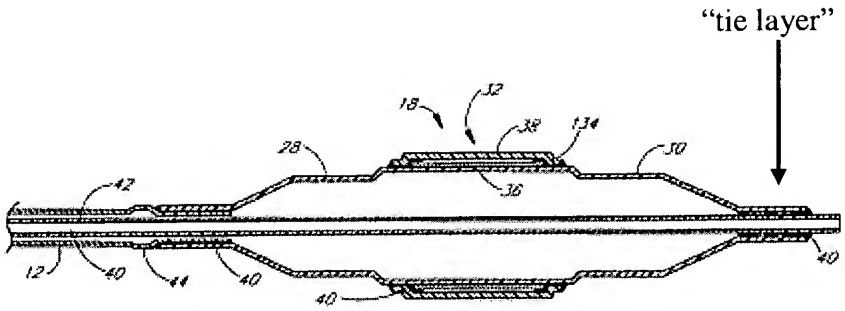

FIG. 11

This element in Trauthen et al. is not numbered with a reference numeral. However, Trauthen et al. disclose that the balloon can be attached to the catheter shaft with an adhesive. It is assumed that what is seen in Figures 11 and 12 must be an adhesive. This same conclusion was reached during the telephone interview with the Examiner. However, the Examiner further indicated that an adhesive is not structurally distinct from the claimed tie layer.

Applicant has amended claim 23 in order to further define the invention and to more clearly recite some of the structural differences between a tie layer and an adhesive. For example, claim 23 now recites that the tie layer is defined by a heat shrink tubular member that is heat shrunk onto the inner tubular member and thermally bonded with the distal waist of the balloon. It does not appear as though Trauthen et al. disclose or teach a heat shrink tubular member or that their "tie layer" represents such a structure. Therefore, Applicant respectfully submits that Trauthen et al. do not anticipate amended claim 23 or claims 24-28 depending therefrom.

Regarding claims 29-34, claim 29 similarly recites the limitation of:

> a tie layer insert disposed between and attached to both the distal waist of the balloon and the distal end region of the second tubular member, the tie layer insert having a length that is substantially the same as the distal waist length.

Similar to what is stated above, it is believed that this limitation distinguishes claim 29 from Hamilton et al. Therefore, Applicant respectfully requests that the rejection of claims 29-34 in light of Hamilton et al. be withdrawn.

Regarding claim 29-34 in view of Trauthen et al., amended claim 29 now recites that the tie layer is thermally bonded to both the distal waist of the balloon and the distal end region of the second tubular member. Typical adhesives do not meet these structural requirements. Instead, adhesives typically bind structures when the adhesive "cures", for example, by evaporation of a solvent in which the adhesive is dissolved in. Accordingly, Trauthen et al. do not appear to disclose or teach the claimed tie layer. Therefore, Applicant asserts that Trauthen et al. do not anticipate amended claim 29 or claims 30-34 depending therefrom.

Regarding claim 35, amended claim 35 now recites that the multi-layer insert has a length that is substantially the same as the length of the distal portion of the balloon. Similar to what is described above, this amendment more clearly distinguishes claim 35 from Hamilton et al. because the "tie layer" in Hamilton et al. spans the full length of the balloon. Trauthen et al. also fail to anticipate claim 35 because the adhesive "tie layer" appears to be only a single layer, not multi-layer. Nothing in the Trauthen et al. disclosure appears to teach or disclose the use of the claimed multi-layer insert. Accordingly, amended claim 35 is asserted to also be patentable over Trauthen et al.

Regarding claim 36, amended claim 36 now recites the step of thermally bonding the tie layer to the inner tubular member. It is believed that neither Hamilton et al. nor Trauthen et al. disclose this step. For example, Hamilton et al. disclose at column 5, lines 50-53, that balloon distal end 28 is bonded to shaft distal end 20 with a suitable adhesive. Additionally, Trauthen et al. also appear to teach attaching the balloon to a shaft with an adhesive rather than with a

thermal bond. Therefore, it is asserted that amended claim 36 is patentable over these references. Newly added claims 37 and 38 further define the claimed method.

Based on the above amendments and remarks, Applicant respectfully submits that amended claims 23, 29, 35 and 36 are patentably distinct from both Hamilton et al. and Trauthen et al. Additionally, claims 24-28 and 30-34, which depend from claims 23 and 29, respectively, are also patentable for at least this reason and because they add significant elements to distinguish them further from the prior art. In light of these amendments and remarks, Applicant respectfully requests that the rejection of claims 23-36 under 35 U.S.C. §102(e) be withdrawn.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By his Attorney,

Date: 5/4/04

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